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# FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 1,206.00)

## Complete if Known

|                      |                       |
|----------------------|-----------------------|
| Application Number   | To Be Assigned        |
| Filing Date          | Herewith              |
| First Named Inventor | Hatim Y. Amro, et al. |
| Examiner Name        | Unknown               |
| Group Art Unit       | Unknown               |
| Attorney Docket No.  | 16356.559 (DC-02561)  |

## METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 08-1394  
 Deposit Account Name: Haynes and Boone, L.L.P.

☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status See 37 CFR 1.27

2. ☐ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

## FEE CALCULATION

## 1. BASIC FILING FEE

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description        | Fee Paid |
|----------------------------|----------------------------|------------------------|----------|
| 101 710                    | 201 355                    | Utility filing fee     | 710.00   |
| 106 320                    | 206 160                    | Design filing fee      |          |
| 107 490                    | 207 245                    | Plant filing fee       |          |
| 108 710                    | 208 355                    | Reissue filing fee     |          |
| 114 150                    | 214 75                     | Provisional filing fee |          |

SUBTOTAL (1) (\$)

## 2. EXTRA CLAIM FEES

Total Claims: 32 -20\*\* = 12 x 18 = 216.00  
 Independent Claims: 6 -3\*\* = 3 x 80 = 240.00  
 Multiple Dependent: =

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description  |
|----------------------------|----------------------------|--|
| 103 18                     | 203 9                      | Claims in excess of 20                                     |
| 102 80                     | 202 40                     | Independent claims in excess of 3                          |
| 104 270                    | 204 135                    | Multiple dependent claim, if not paid                      |
| 109 80                     | 209 40                     | ** Reissue independent claims over original patent         |
| 110 18                     | 210 9                      | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$ 456.00)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description  | Fee Paid |
|----------------------------|----------------------------|--|----------|
| 105 130                    | 205 65                     | Surcharge - late filing fee or oath  |          |
| 127 50                     | 227 25                     | Surcharge - late provisional filing fee or cover sheet                     |          |
| 139 130                    | 139 130                    | Non-English specification  |          |
| 147 2,520                  | 147 2,520                  | For filing a request for ex parte reexamination                            |          |
| 112 920*                   | 112 920*                   | Requesting publication of SIR prior to Examiner action                     |          |
| 113 1,840*                 | 113 1,840*                 | Requesting publication of SIR after Examiner action                        |          |
| 115 110                    | 215 55                     | Extension for reply within first month                                     |          |
| 116 390                    | 216 195                    | Extension for reply within second month                                    |          |
| 117 890                    | 217 445                    | Extension for reply within third month                                     |          |
| 118 1,390                  | 218 695                    | Extension for reply within fourth month                                    |          |
| 128 1,890                  | 228 945                    | Extension for reply within fifth month                                     |          |
| 119 310                    | 219 155                    | Notice of Appeal   |          |
| 120 310                    | 220 155                    | Filing a brief in support of an appeal                                     |          |
| 121 270                    | 221 135                    | Request for oral hearing   |          |
| 138 1,510                  | 138 1,510                  | Petition to institute a public use proceeding                              |          |
| 140 110                    | 240 55                     | Petition to revive - unavoidable   |          |
| 141 1,240                  | 241 620                    | Petition to revive - unintentional   |          |
| 142 1,240                  | 242 620                    | Utility issue fee (or reissue)   |          |
| 143 440                    | 243 220                    | Design issue fee   |          |
| 144 600                    | 244 300                    | Plant issue fee  |          |
| 122 130                    | 122 130                    | Petitions to the Commissioner  |          |
| 123 50                     | 123 50                     | Petitions related to provisional applications                              |          |
| 126 240                    | 126 240                    | Submission of Information Disclosure Stmt                                  |          |
| 581 40                     | 581 40                     | Recording each patent assignment per property (times number of properties) | 40.00    |
| 146 710                    | 246 355                    | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 149 710                    | 249 355                    | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 179 710                    | 279 355                    | Request for Continued Examination (RCE)                                    |          |
| 169 900                    | 169 900                    | Request for expedited examination of a design application                  |          |

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40.00)

## SUBMITTED BY

|                   |               |                                  |              |                          |
|-------------------|---------------|----------------------------------|--------------|--------------------------|
| Name (Print/Type) | James R. Bell | Registration No (Attorney/Agent) | 26,528       | Complete (if applicable) |
| Signature         |               | Telephone                        | 512/867-8407 | Date                     |
|                   |               |                                  |              | 11-15-00                 |

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|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 2 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |

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Examiner: N/A

Group Art Unit: N/A

For: WEB-BASED FACTORY  
MANUFACTURING OF COMPUTERS IN  
A BUILD-TO-ORDER MANUFACTURING  
ENVIRONMENT

# EXPRESS MAIL CERTIFICATE

Date of Deposit: 11/14/00

1. Utility Patent Application Transmittal Sheet;
2. Fee Transmittal Sheet (in duplicate);
3. Patent Application consisting of 8 pages of Specification, 9 pages of Claims and 1 page Abstract of Disclosure;
4. Four (4) Drawing sheets;
5. Declaration and Power of Attorney;
6. Assignment and Recordation Cover Sheet;
7. Information Disclosure Statement with cited references;
8. Check in the amount of \$1,206.00 for filing fee; and
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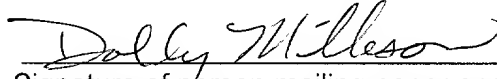
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**WEB-BASED FACTORY MANUFACTURING OF COMPUTERS IN A BUILD-TO-ORDER MANUFACTURING ENVIRONMENT**

Inventors: Hatim Y. Amro  
14025 Wells Port Drive  
Austin, Texas 78728

Robert G. Nadon  
102 Debora Court  
Georgetown, Texas 78628


Assignee: Dell Products L.P.  
One Dell Way  
Round Rock, Texas 78682-2244

David L. McCombs  
HAYNES AND BOONE, L.L.P.  
901 Main Street  
Suite 3100  
Dallas, Texas 752023789  
(214) 651-5533

009161 624260

**PATENT**

Docket No.: DC-02561 (16356.559)

|                                                                                                                                                                                                                                                                |                                                                                    |
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| <u>Dolly Milleson</u>                                                                                                                                                                                                                                          |  |
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**WEB-BASED FACTORY MANUFACTURING OF COMPUTERS IN A BUILD-TO-ORDER MANUFACTURING ENVIRONMENT**

Background

The disclosures herein relate generally to build-to-order ("BTO") computers and more particularly to a system and method for performing web-based installation of software on such computers.

In a BTO computer manufacturing environment, one of the most, if not the most, time-consuming stages is the downloading and installation of customer-selected software onto the hard drive of each of the computers. In particular, after each computer has been assembled according to the customer's requirements, the computer is placed in a burnrack and connected to a network server via appropriate network connections. At this point, all software components ordered by the customer, including, for example, one or more operating systems ("OS"), appropriate drivers, and selected application programs, are downloaded from the server to the computer, where they are installed on the hard drive thereof. Once the software has been installed, the computer is tested to insure that it is operational.

As previously alluded to, the factory-installation process described above is

an extremely cumbersome, slow, and therefore expensive process. One reason for this is that many applications are automatically loaded and installed with the customer-selected OS regardless of customer requirements. In addition, there is an ever-changing architecture that computer manufacturers must fit into the factory structure (e.g., 64-bit architecture). In a particular embodiment of a factory installation facility, during the installation process, an entire OS along with all applications is loaded into the box via a NetWare server employing a FIDA floppy.

Therefore, what is needed is a system and method that increases the speed and decreases the cost involved in manufacturing BTO computers, especially, with regard to the software installation process.

### Summary

One embodiment accordingly provides for increasing the speed of software installation. To this end, an icon is displayed on a display of a computer system. The icon is selected and, in response, a website comprising an Internet boot facility is accessed via an Internet connection. An ID number is provided to the Internet boot facility for identifying the computer system to the internet boot facility. At least one software product associated with the ID number is downloaded to and installed on the computer system.

A principal advantage of the embodiments described herein is that they reduce the amount of time required between taking an order for a computer and shipping that computer to the customer.

Another advantage of the embodiments described herein is that, due to the reduction in time, and therefore cost, required to manufacture and ship computer in

this manner, the computer manufacturer can offer customers willing to take advantage of the features described herein a discount on the purchase price of their computers.

5

Brief Description of the Drawing Figures

Fig. 1 is a block diagram of an environment for implementing the embodiments described herein.

10

Fig. 2 illustrates a first embodiment.

Fig. 3 illustrates an alternative embodiment.

Fig. 4 illustrates yet another alternative embodiment.

15

Detailed Description

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Fig. 1 is an illustration of an environment 10 for implementing the embodiments described herein. The environment 10 includes a web server 12 connected to one or more databases, represented in Fig. 1 as a customer information database 14 and a software database 16. The server 12 and databases 14, 16, collectively constitute an Internet boot facility 18. As described in greater detail below, BTO computers, represented in Fig. 1 by a computer 20, are capable of connecting to the boot facility 18 via a conventional Internet connection 22 to download and install software packages therefrom. Each BTO computer, including the computer 20, has assigned thereto a unique system ID number.

25

In particular, the customer information database 14 includes a file for each

computer manufactured by the manufacturer, including the computer 20, indexed by the computer's system ID number. The file itself includes a list of all of the software that the customer has purchased in connection with the identified computer. The software database 16 includes downloadable copies of all of the software available  
5 for installation on computers manufactured by the manufacturer.

Installed on a hard drive (not shown) of the computer 20 is the minimum software 23 required to render the computer 20 operational and capable of connection to the Internet. The computer 20 also includes a display 24 for  
10 displaying a desktop element 26 including one or more icons 28, as well as web pages (not shown) generated by the server 12.

Fig. 2 is a flowchart of the operation of one embodiment. In step 200, after the computer 20 has booted, the desktop element 26, including icons 28, is  
15 displayed thereon. In this embodiment, one of the icons 28 is a web-based install ("WBI") icon which, when clicked on, causes the computer 20 to be connected to the boot facility 18. In step 202, a responsive to the customer clicking on the WBI icon, the computer 20 is connected to the boot facility 18 via the Internet connection 22. In step 204, the system ID number for the computer 20 is automatically provided to  
20 the boot facility 18. In step 206, the system ID number is used to access the corresponding file in the customer information database 14. In step 208, a web page including a list of the software specified in the file accessed in step 206 is displayed on the display 24. Additionally, software not previously purchased by the customer, and therefore not specified in the accessed file, may be included on the  
25 web page.

In step 210, responsive to the customer clicking on one of the software items in the list, a determination is made whether the customer has paid for the selected



software. If not, execution proceeds to step 212, in which the customer is prompted to enter payment information. In step 214, a determination is made whether the customer has entered valid payment information in step 212. If not, execution returns to step 212 and the customer is again prompted; otherwise, execution  
5 proceeds to step 216. Similarly, if in step 210, it is determined that the customer has paid for the selected software, execution proceeds directly to step 216. In step 216, the selected software is downloaded from the software database 16 to the hard drive of the computer 20 and installed thereon.

10 Fig. 3 is a flowchart of the operation of an alternative embodiment. In step 300, after the computer 20 has booted, the desktop element 26, including icons 28, is displayed thereon. In this embodiment, each of the icons 28 is associated with a software package available to be downloaded to the hard drive of the computer 20. In step 302, a responsive to the customer clicking on one of the icons 28, the  
15 computer 20 is connected to the boot facility 18 via the Internet connection 22. In step 304, the system ID number for the computer 20 is automatically provided to the boot facility 18. In step 306, the system ID number is used to access the corresponding file in the customer information database 14.

20 In step 310, a determination is made whether the customer has paid for the selected software. If not, execution proceeds to step 312, in which the customer is prompted to enter payment information. In step 314, a determination is made whether the customer has entered valid payment information in step 312. If not, execution returns to step 312 and the customer is again prompted; otherwise,  
25 execution proceeds to step 316. Similarly, if in step 310, it is determined that the customer has paid for the selected software, execution proceeds directly to step 316. In step 316, the selected software is downloaded from the software database 16 to the hard drive of the computer 20 and installed thereon.

In view of the foregoing, one embodiment, accordingly, provides a system and method for facilitating factory-installation of software in a build-to-order ("BTO") manufacturing environment using a web-based software distribution system. In particular, subsequent to physical assembly, the minimum software required for a computer to boot up, minimally function and connect to the Internet, rather than all of the software purchased by the customer, is installed by the computer manufacturer on the hard drive thereof before the computer is shipped to the customer.

In one embodiment, when the customer first boots the computer, a "Web-Based Install" ("WBI") icon is displayed on the desktop interface element thereof. Clicking on this icon causes the computer to connect, via an Internet connection, to a secure website of the computer manufacturer, hereinafter referred to as an "Internet boot facility". A system ID number uniquely identifying the particular computer to the Internet boot facility, and therefore to the computer manufacturer, is automatically provided to the Internet boot facility and a web page including a list of all of the software for which the customer has purchased for the identified computer is displayed to the customer. At that point, the customer may select one or more programs to be downloaded to and installed on the computer by selecting, e.g., by clicking on, the associated link(s) or icon(s). Preferably, an "Install All" link or icon will also be included on the web page to enable the customer to download and install all of the software purchased for the computer with a single click.

In an alternative embodiment, rather than a WBI icon, icons for each of the software packages purchased by the customer for the particular computer are displayed on the desktop interface element thereof when the computer is first booted. In this embodiment, clicking on an icon causes the computer to be

connected to the Internet boot facility, and, after the computer is identified to the Internet boot facility by the system ID number, downloading and installation of the software identified by the icon are performed. As described above, an "Install All" icon will preferably be included on the desktop element to enable the customer to  
5 initiate the downloading and installation of all of the purchased software with a single selection or click.

In yet another alternative embodiment, as soon as the customer boots the computer for the first time, the computer connects to the Internet boot facility and,  
10 after the computer is identified to the Internet boot facility by the system ID number, the process of downloading and installing the purchased software is conducted automatically, without user intervention. Alternatively, similar to the first embodiment described above, the customer may selectively download and install software applications via a web page list.

Another aspect of the above-described embodiments includes the ability to enable customers to download and install software not previously purchased by the customer by clicking on an associated icon or link provided on the Internet boot facility web page or desktop element. In these situations, the customer will be  
15 required to provide some form of payment, such as a credit or debit card number, to pay for the software. Alternatively, "bonus" software may be provided in the above-described manner at no cost to the customer as a marketing tactic, for example.

Fig. 4 is a flowchart of the operation of yet another alternative embodiment.  
25 In step 400, responsive to the computer 20 being booted for the first time, the computer 20 is immediately connected to the boot facility 18 via the Internet connection 22. In step 404, the system ID number for the computer 20 is automatically provided to the boot facility 18. In step 406, the system ID number is

used to access the corresponding file in the customer information database 14. In step 408, all of the software specified in the is downloaded from the software database 16 to the hard drive of the computer 20 and installed thereon.

5           Although illustrative embodiments have been shown and described, a wide range of modification change and substitution is contemplated in the foregoing disclosure and in some instances, some features of the embodiments may be employed without a corresponding use of other features. For example, it is conceivable that some software, although not purchased by the customer in  
10           connection with a particular computer, may be made available at no cost to the customer as a bonus, e.g., to encourage the customer to purchase other software from the same developer. Moreover, instead of requiring that the customer individually select each software package to be downloaded and installed, one of the icons or links on the desktop element 26 or web page could be designated as an  
15           "Install All" icon or link. Clicking on this icon or link would initiate the downloading and installation of all of the software purchase for a particular system as indicated in the corresponding file in the customer information database 14. Accordingly, it is appropriate that the appended claims be construed broadly and in a manner consistent with the scope of the embodiments disclosed herein.

Claims

What is claimed is:

- 1 1. A method of enabling a user to complete installation of selected software  
2 programs on a computer system via the Internet, the method comprising:  
3 displaying on a display of the computer system an icon;  
4 responsive to selection of the icon, accessing, via an Internet  
5 connection, a website comprising an Internet boot facility;  
6 providing to the Internet boot facility an ID number identifying the  
7 computer system to the Internet boot facility; and  
8 downloading to and installing on the computer system at least one  
9 software product associated with the ID number.
- 1 2. The method of claim 1 wherein the icon is associated with a software product  
2 and wherein the at least one software product downloaded to and installed on  
3 the computer system comprises the associated software product.
- 1 3. The method of claim 2 wherein the associated software product was  
2 previously purchased in connection with the computer system.
- 1 4. The method of claim 2 wherein the associated software product was not  
2 previously purchased in connection with the computer system, the method  
3 further comprising, prior to the downloading and installing, prompting the user  
4 to provide payment information to purchase the associated software product.

- 1 5. The method of claim 1 further comprising:  
2 prior to the downloading and installing, displaying a web page of the  
3 Internet boot facility comprising a list of software products associated with the  
4 ID number; and  
5 responsive to selection of one of the listed software products,  
6 downloading to and installing on the computer system the selected one of the  
7 listed software products.
- 1 6. The method of claim 5 wherein the listed software products comprise  
2 software products previously purchased in connection with the computer  
3 system.
- 1 7. The method of claim 5 wherein the selected one of the listed software  
2 products was not previously purchased in connection with the computer  
3 system, the method further comprising, prior to the downloading and  
4 installing, prompting the user to enter payment information to purchase the  
5 selected one of the listed software products.
- 1 8. The method of claim 1 wherein the Internet boot facility is maintained by a  
2 manufacturer of the computer system.
- 1 9. The method of claim 1 wherein the downloading and installing comprises  
2 automatically downloading to and installing on the computer system all  
3 software products previously purchased in connection with the computer  
4 system.

**PATENT**

Docket No.: DC-02561 (16356.559)

- 1 10. A system for enabling a user to complete installation of selected software  
2 programs on a computer system via the Internet, the system comprising:  
3 means for displaying on a display of the computer system an icon;  
4 means responsive to selection of the icon for accessing, via an  
5 Internet connection, a website comprising an Internet boot facility;  
6 means for providing to the Internet boot facility an ID number  
7 identifying the computer system to the Internet boot facility; and  
8 means for downloading to and installing on the computer system at  
9 least one software product associated with the ID number.
- 1 11. The system of claim 10 wherein the icon is associated with a software  
2 product and wherein the at least one software product downloaded to and  
3 installed on the computer system comprises the associated software product.
- 1 12. The system of claim 11 wherein the associated software product was  
2 previously purchased in connection with the computer system.
- 1 13. The system of claim 11 wherein the associated software product was not  
2 previously purchased in connection with the computer system, the method  
3 further comprising, prior to the downloading and installing, prompting the user  
4 to provide payment information to purchase the associated software product.

**PATENT**

Docket No.: DC-02561 (16356.559)

- 1 14. The system of claim 10 further comprising:  
2 means for displaying a web page of the Internet boot facility comprising a list  
3 of software products associated with the ID number prior to the downloading  
4 and installing; and  
5 means responsive to selection of one of the listed software products  
6 for downloading to and installing on the computer system the selected one of  
7 the listed software products.
- 1 15. The system of claim 14 wherein the listed software products comprise  
2 software products previously purchased in connection with the computer  
3 system.
- 1 16. The system of claim 14 wherein the selected one of the listed software  
2 products was not previously purchased in connection with the computer  
3 system, the method further comprising, prior to the downloading and  
4 installing, prompting the user to enter payment information to purchase the  
5 selected one of the listed software products.
- 1 17. The system of claim 10 wherein the Internet boot facility is maintained by a  
2 manufacturer of the computer system.
- 1 18. The system of claim 10 wherein the downloading and installing comprises  
2 automatically downloading to and installing on the computer system all  
3 software products previously purchased in connection with the computer  
4 system.



- 1 19. A method of enabling a user to complete installation of selected software  
2 programs on a computer system via the Internet, the method comprising:  
3 responsive to an initial boot-up of the computer system, accessing, via  
4 an Internet connection, a website comprising an Internet boot facility;  
5 providing to the Internet boot facility an ID number identifying the  
6 computer system to the Internet boot facility; and  
7 downloading to and installing on the computer system at least one  
8 software product associated with the ID number.
- 1 20. The method of claim 19 wherein the downloading and installing comprises  
2 automatically downloading to and installing on the computer system all  
3 software products previously purchased in connection with the computer  
4 system.
- 1 21. The method of claim 19 further comprising:  
2 prior to the downloading and installing, displaying a web page of the  
3 Internet boot facility comprising a list of software products associated with the  
4 ID number;  
5 responsive to selection of one of the listed software products,  
6 downloading to and installing on the computer system the selected one of the  
7 listed software products.
- 1 22. The method of claim 21 wherein the listed software products comprise  
2 software products previously purchased in connection with the computer  
3 system.

- 1 23. The method of claim 21 wherein the listed software products comprise  
2 software products not previously purchased in connection with the computer  
3 system, the method further comprising, prior to the downloading and  
4 installing, prompting the user to enter payment information to purchase the  
5 selected one of the listed software products.
- 1 24. The method of claim 19 wherein the Internet boot facility is maintained by a  
2 manufacturer of the computer system.
- 1 25. A system for enabling a user to complete installation of selected software  
2 programs on a computer system via the Internet, the system comprising:  
3 means responsive to an initial boot-up of the computer system for  
4 accessing, via an Internet connection, a website comprising an Internet boot  
5 facility;  
6 means for providing to the Internet boot facility an ID number  
7 identifying the computer system to the Internet boot facility; and  
8 means for downloading to and installing on the computer system at  
9 least one software product associated with the ID number.
- 1 26. The system of claim 25 wherein the means for downloading and installing  
2 comprises means for automatically downloading to and installing on the  
3 computer system all software products previously purchased in connection  
4 with the computer system.

- 1 27. The system of claim 25 further comprising:  
2 means for displaying a web page of the Internet boot facility  
3 comprising a list of software products associated with the ID number prior to  
4 the downloading and installing; and  
5 means responsive to selection of one of the listed software products  
6 for downloading to and installing on the computer system the selected one of  
7 the listed software products.
- 1 28. The system of claim 27 wherein the listed software products comprise  
2 software products previously purchased in connection with the computer  
3 system.
- 1 29. The system of claim 27 wherein the listed software products comprise  
2 software products not previously purchased in connection with the computer  
3 system, the method further comprising, prior to the downloading and  
4 installing, prompting the user to enter payment information to purchase the  
5 selected one of the listed software products.
- 1 30. The method of claim 25 wherein the Internet boot facility is maintained by a  
2 manufacturer of the computer system.

**PATENT**

Docket No.: DC-02561 (16356.559)

1 31. An Internet boot facility maintained by a manufacturer of a computer system,  
2 the Internet boot facility comprising:

3 an Internet server for connecting, via an Internet connection, to the  
4 computer system;

5 a first database connected to the Internet server for maintaining a list  
6 of software products purchased in connection with the computer system as  
7 identified by an ID number;

8 a second database for storing software products downloadable to the  
9 computer system via the Internet connection;

10 wherein, responsive to connection of the computer system to the  
11 Internet boot facility via the Internet connection:

12 the computer ID number is provided to the Internet server;

13 the list of software products purchased in connection with the  
14 computer system is displayed on a display of the computer system;

15 responsive to selection of one or more of the listed software products,  
16 the selected one or more of the listed software products are downloaded to  
17 and installed on the computer system via the Internet connection.

1 32. An Internet boot facility maintained by a manufacturer of a computer system,  
2 the Internet boot facility comprising:

3 an Internet server for connecting, via an Internet connection, to the  
4 computer system;

5 a first database connected to the Internet server for maintaining a list  
6 of software products purchased in connection with the computer system as  
7 identified by an ID number;

8 a second database for storing software products downloadable to the  
9 computer system via the Internet connection;

10 wherein, responsive to connection of the computer system to the  
11 Internet boot facility via the Internet connection:

12 the computer ID number is provided to the Internet server; and  
13 the software products purchased in connection with the computer  
14 system are downloaded to and installed on the computer system via  
15 the Internet connection.

**WEB-BASED FACTORY MANUFACTURING OF COMPUTERS IN A BUILD-TO-ORDER MANUFACTURING ENVIRONMENT**

Abstract of Disclosure

5

One embodiment is a system and method for facilitating factory-installation of software in a build-to-order ("BTO") manufacturing environment using a web-based software distribution system. Subsequent to physical assembly, the minimum software required for a computer to boot up and operate and connect to the Internet is installed on the hard drive thereof. Upon initial boot-up of the computer, a "Web-Based Install" ("WBI") icon is displayed on the desktop interface element thereof. Clicking on this icon causes the computer to be connected to a secure website of the computer manufacturer ("Internet boot facility"). An ID number identifying the particular computer is then automatically provided to the Internet boot facility and a page including a list of all of the software for which the customer purchased for the identified computer is displayed to the customer. The customer may select one or more programs to be downloaded to and installed on the computer by clicking on the associated link(s) or icon(s). Alternatively, rather than a WBI icon, icons for each of the purchased software packages are displayed on the desktop interface element thereof when the computer is first booted. Clicking on an icon causes the computer to connect to the Internet boot facility, and, after the computer is identified thereto, downloading and installation of the software identified by the icon is performed. Alternatively, the download and installation process is initiated immediately and automatically when the computer is first booted.

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(16356.559)  
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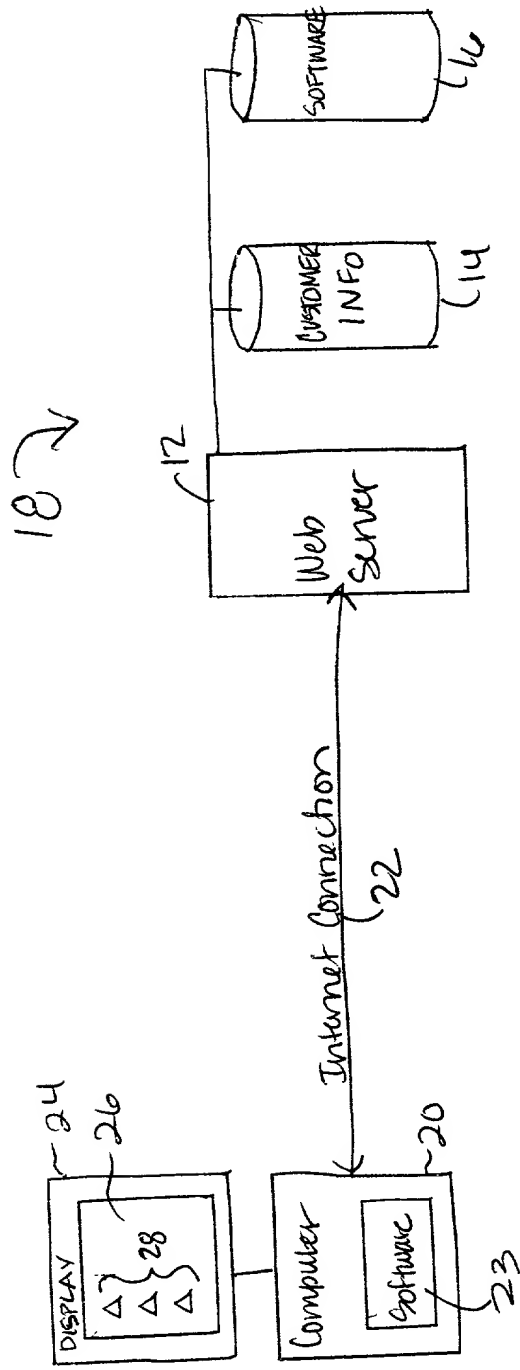


Fig. 1

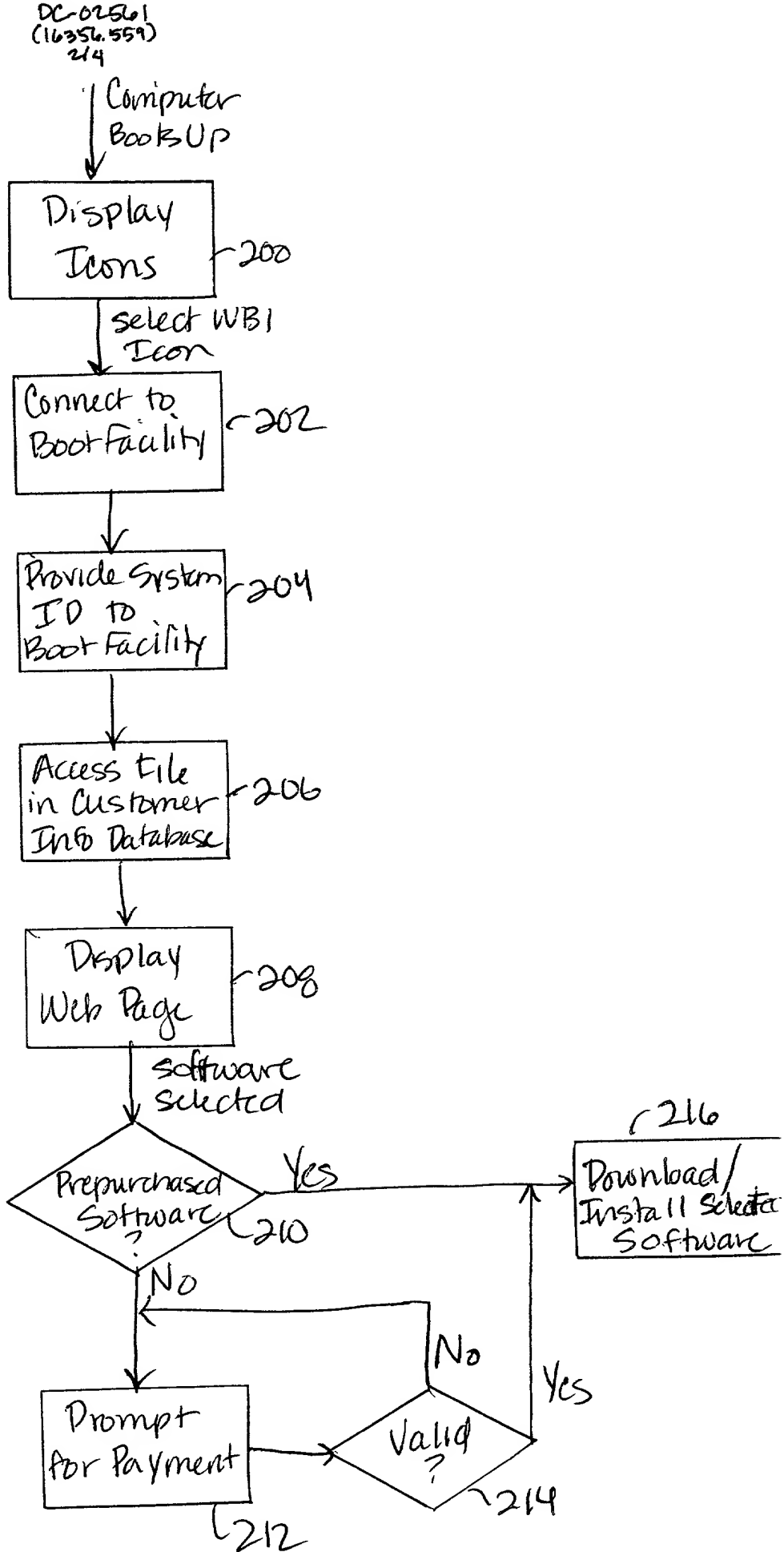


Fig. 2



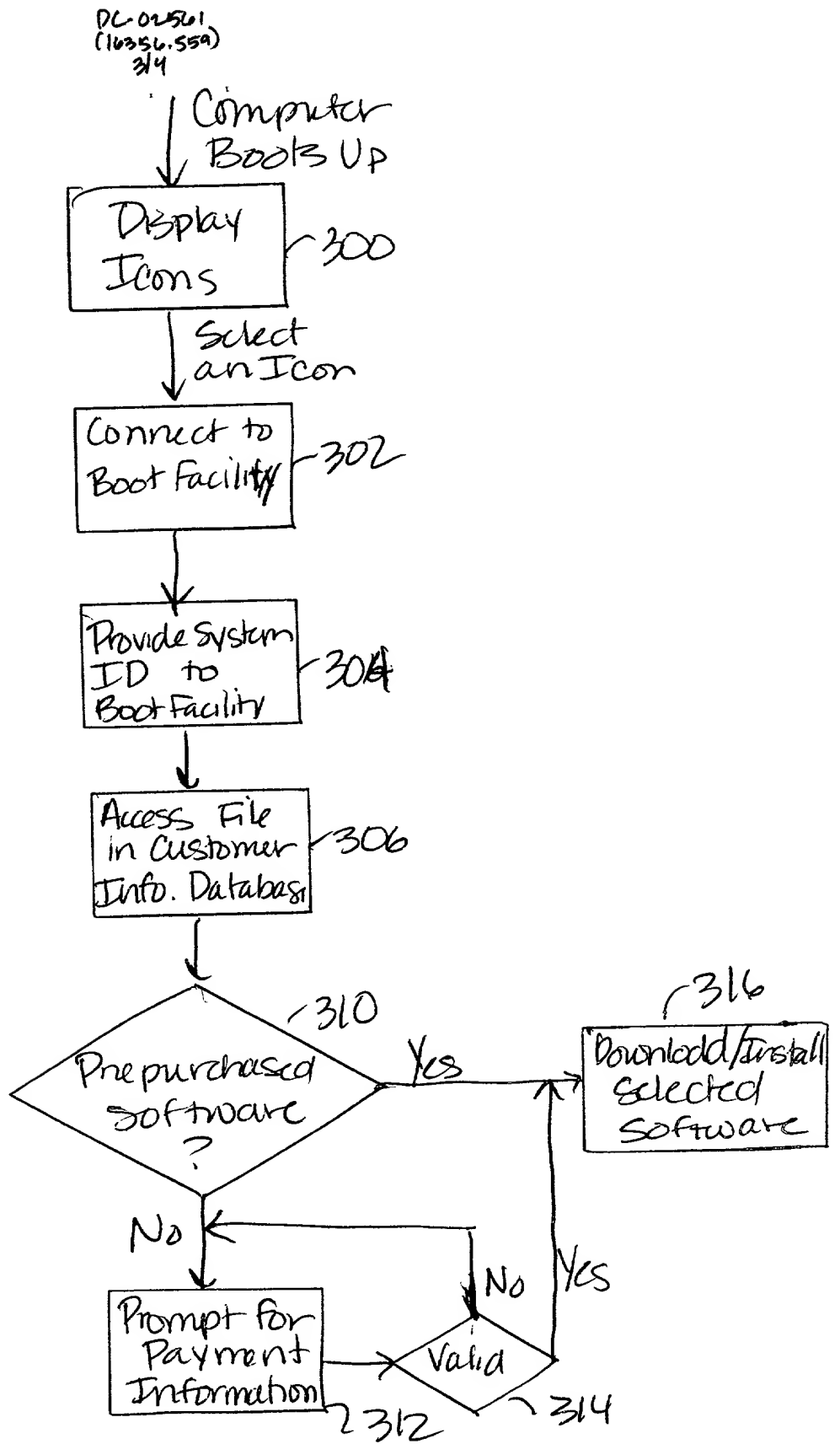
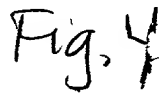


Fig. 3



DOCKET NUMBER: DC-02561 (16356.559)

## DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As below named inventors, we hereby declare that:

Our residence, post office address and citizenship are as stated below next to our names;

We believe we are the original, first and sole joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled

# WEB-BASED FACTORY MANUFACTURING OF COMPUTERS IN A BUILD-TO-ORDER MANUFACTURING ENVIRONMENT

the specification of which: (check one)

XXX is attached hereto.

\_\_\_\_\_ was filed on \_\_\_\_\_  
under Attorney's Docket Number \_\_\_\_\_  
as Application Serial No. \_\_\_\_\_  
and was amended on \_\_\_\_\_ (if applicable).

We hereby state that we have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 CFR 1.56.

POWER OF ATTORNEY: As a named inventor, we hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

|                       |                 |                           |                 |
|-----------------------|-----------------|---------------------------|-----------------|
| Jeffrey M. Becker     | Reg. No. 35,442 | Mark P. Kahler            | Reg. No. 29,178 |
| James R. Bell         | Reg. No. 26,528 | Warren B. Kice            | Reg. No. 22,732 |
| Brandi W. Sarfatis    | Reg. No. 37,713 | Christopher P. Kosh       | Reg. No. 42,760 |
| Randall E. Colson     | Reg. No. 40,566 | Michael J. Balconi-Lamica | Reg. No. 34,291 |
| Michael A. Davis, Jr. | Reg. No. 35,488 | Todd Mattingly            | Reg. No. 40,298 |
| Ruben C. DeLeon       | Reg. No. 37,812 | David L. McCombs          | Reg. No. 32,271 |
| Anthony Peterman      | Reg. No. 38,270 | David M. O'Dell           | Reg. No. 42,044 |
| Henry Garrana         | Reg. No. 27,887 | Phillip B. Philbin        | Reg. No. 35,979 |
| Rita M. Irani         | Reg. No. 31,028 | Diana L. Roberts          | Reg. No. 36,654 |

Send correspondence to David L. McCombs, Haynes and Boone, L.L.P., 901 Main Street, Suite 3100, Dallas, Texas 75202-3789 and direct all telephone calls to David L. McCombs at 214/651-5533.

FULL NAME OF INVENTOR: Hatim X. Amro

INVENTOR'S SIGNATURE:  DATED: 11/13/2000

RESIDENCE: 14025 Wells Port Drive, Austin, Texas 78628

CITIZENSHIP: United States of America

POST OFFICE ADDRESS: \_\_\_\_\_

FULL NAME OF INVENTOR: Robert G. Nadon

INVENTOR'S SIGNATURE:  DATED: 11/13/2000

RESIDENCE: 102 Debora Court, Georgetown, Texas 78628

CITIZENSHIP: United States of America

POST OFFICE ADDRESS: \_\_\_\_\_